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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/022,881      | 12/13/2001  | James K. Guy         | 99-377/009774       | 4438             |

7590 10/04/2004

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| EXAMINER |
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MAHONEY, CHRISTOPHER E

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| ART UNIT | PAPER NUMBER |
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2851

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/022,881

Applicant(s)

GUY, JAMES K.

Examiner

Christopher E Mahoney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,9-13 and 17-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,9-13 and 17-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

The drawings were received on July 13, 2004. These drawings are approved by the examiner.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Inaba (U.S. Patent No. 4,491,401). Inaba teaches an iris comprising a stator assembly (blade casing front plate or blade casing front plate and back plate) 3/103 or 103 with 101 comprising a frame coupled to an electrically wound substantially annular magnetic core 12/112; a rotor (actuator ring) 5/105 rotatably coupled to the substantially annular magnetic core and defining a channel O. A diaphragm coupled to the stator comprises a plurality of diaphragm leaves 6/106 pivotally arranged to form an adjustable aperture substantially concentric with the channel. A first portion 8/108 of at least one of said plurality of leaves extends from said diaphragm and is coupled to the stator. A second portion 9/109 of another of said leaves extends from said diaphragm and is coupled to the rotor. The applicant is directed to review figures 1-3, 7-9, col. 2, lines 59-66, col. 3, lines 14-25, and col. 10, line 47 through col. 12, line 1. While each blade 6/106 in the Inaba reference contains both 8/108 and 9/109 any one blade may read on the claimed at least one of the plurality, while any of the other blades can read on the claimed another of said plurality of

leaves. A sensor 19 detects aperture diameter data so that actuator 38 provides electrical current through windings

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 9-13, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inaba (U.S. Patent No. 4,491,401) in view of Devenyi (US Patent 5,955,806). Inaba teaches the salient features of the claimed invention except for winding on the magnetic core. However Inaba does teach that the motor configuration described in the detailed description and a hollow motor formed in a hollow shape similar to the shape of the diaphragm body (col. 1, lines 52-53) is a known equivalent. Devenyi discloses a torque motor having an annular, cylindrically symmetric stator and rotor. The stator 30 includes a frame and multiple annular magnet members 32 (See Figure 6). The annular magnet members comprise a plurality of magnets mounted on various portions (or annular elements) of the annular stator. (See Figure The stator frame comprises an inner wall (first annular member) and an outer wall (second outer wall). The base of the stator functions as a sidewall. The rotor 22 is rotatably coupled to the annular magnet member 32 and defines a channel 68. The device of Devenyi further comprises a diaphragm coupled to the stator via pin 65 and to the rotor via pin 64. The diaphragm includes leaves 63 pivotally arranged to form an adjustable aperture concentric with the channel. Devenyi also discloses a light sensor 72, sensor electronics 76 and a motor controller (actuator) 80 for

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detecting the light intensity passing through the aperture. This data is then sent to the electronics and motor controller (logic) to control the iris/diaphragm via leads 26. (Column 4, lines 6-22). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Devenyi for the purpose of improved size, weight and efficiency.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inaba (U.S. Patent No. 4,491,401) in view of Devenyi (US Patent 5,955,806) as applied to claims 1-5, 9-13, and 17-19, and further in view of Hoesterey (U.S. Patent No. 4,034,949) or Prince (U.S. Patent No. 4,050,085). Inaba in view of Devenyi teaches the salient features of the claimed invention except for the face that the iris is used in a telescope. Both Hoesterey and Prince teach that it was known to use an iris in a telescope. The applicant is directed to review col. 2, lines 50-54 of Hoesterey and col. 7, lines 46-48 of Prince. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Scruggs or Bellows for the purpose of controlling the amount of light per unit of time.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inaba (U.S. Patent No. 4,491,401) in view of Devenyi (US Patent 5,955,806) as applied to claims 1-5, 9-13, and 17-19, and further in view of in view of Suzuki (U.S. Patent No. 4,378,146). Inaba in view of Devenyi teaches the salient features of the claimed invention except for the face that the iris is used in a camera. Suzuki teaches that it was known to use an iris (col. 2, line 68) in a camera (col. 3, line 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Suzuki for the purpose of controlling the amount of light per unit of time.

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Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inaba (U.S. Patent No. 4,491,401) in view of Devenyi (US Patent 5,955,806) as applied to claims 1-5, 9-13, and 17-19, and further in view of in view of Scruggs (U.S. Patent No. 3,876,008) or in view of Bellows (U.S. Patent No. 4,790,194). Inaba in view of Devenyi teaches the salient features of the claimed invention except for the face that the iris is used in a pipe. Both Scruggs and Bellows teach that it was known to use an iris in a pipe. The applicant is directed to review col. 3, lines 28-31 of Scruggs and col. 4, lines 4-7 of Bellows. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Scruggs or Bellows for the purpose of controlling the amount of water flow.

#### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

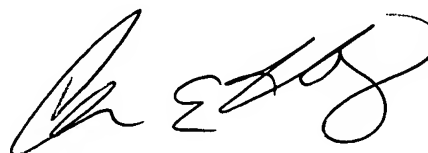
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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E Mahoney whose telephone number is (571) 272-2122. The examiner can normally be reached on 8:30AM-5PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'C. E. Mahoney', is positioned above the printed name.

Christopher E Mahoney  
Primary Examiner  
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